SCORE Search Results Details for Application 10516759 and Search Result 20081112_112527_us-10-516-759-14_copy_24_81.rpr.

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This page gives you Search Results detail for the Application 10516759 and Search Result 20081112_112527_us-10-516-759-14_copy_24_81.rpr.

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GenCore version 6.3

OM protein - protein search, using sw model

Run on: November 12, 2008, 12:14:54 ; Search time 9 Seconds
(without alignments)
620.064 Million cell updates/sec

Title: US-10-516-759-14_COPY_24_81
Perfect score: 350
Sequence: 1 DIKHNRPRRDCVAEGKVCDP.....RNYSRGGVCVTHCNFLNGEP 58

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_80:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	350	100.0	1342	2	A36223	kinase-related tra
2	298	85.1	1339	2	JC4387	epidermal growth f

3	212	60.6	1308	2	A47253	epidermal growth f
4	201	57.4	644	2	A36325	epidermal growth f
5	200	57.1	1210	2	A53183	epidermal growth f
6	198	56.6	1223	1	TVCHLV	epidermal growth f
7	179	51.1	1210	1	GQHUE	epidermal growth f
8	174	49.7	1255	1	A24571	protein-tyrosine k
9	166.5	47.6	1260	1	TVRTNU	protein-tyrosine k
10	150.5	43.0	1369	2	S70713	protein-tyrosine k
11	143.5	41.0	1166	1	S06142	protein-tyrosine k
12	142	40.6	1254	2	I48161	p-185 precursor -
13	133	38.0	843	2	A27131	epidermal growth f
14	128.5	36.7	1323	2	E88257	protein let-23 [im
15	128.5	36.7	1374	2	S70712	protein-tyrosine k
16	115	32.9	1299	2	T43251	furin (EC 3.4.21.7
17	107	30.6	1680	2	A43434	furin (EC 3.4.21.7
18	97.5	27.9	915	2	B48225	probable proprotei
19	96.5	27.6	915	1	A48225	subtilisin-like pr
20	96.5	27.6	1548	2	S34583	serine proteinase
21	95.5	27.3	899	2	G02428	subtilisin-like pr
22	95.5	27.3	915	2	JC6148	subtilisin-like pr
23	95.5	27.3	969	1	A39490	subtilisin-like pr
24	95.5	27.3	975	2	JC5570	subtilisin-like pr
25	93.5	26.7	962	2	JC5571	subtilisin-like pr
26	90.5	25.9	631	2	JC2345	kexin-like protein
27	90.5	25.9	644	2	JC2346	kexin-like protein
28	90.5	25.9	932	2	I52527	PACE4A - mouse (fr
29	90.5	25.9	937	2	I53282	gene PACE4 protein
30	89	25.4	1717	1	A45558	epidermal growth f
31	87	24.9	1372	2	A34157	insulin receptor p
32	87	24.9	1383	2	A36080	insulin receptor p
33	86	24.6	1382	1	INHUR	insulin receptor p
34	84	24.0	427	2	T29872	hypothetical prote
35	84	24.0	1367	1	IGHUR1	insulin-like growt
36	82	23.4	1330	1	GQFFE	epidermal growth f
37	82	23.4	1371	2	A33837	insulin-like growt
38	77.5	22.1	2101	2	S57245	insulin receptor (
39	77.5	22.1	2148	1	A56081	insulin receptor -
40	77	22.0	1363	2	T43220	insulin-like growt
41	74	21.1	1268	2	B36502	insulin receptor-r
42	73.5	21.0	1607	2	T43212	insulin-like growt
43	73	20.9	540	2	B47417	insulin receptor-r
44	72	20.6	329	2	A48805	insulin-like growt
45	71.5	20.4	1274	2	T42017	cysteine rich prot

ALIGNMENTS

RESULT 1
A36223
kinase-related transforming protein (erbB3) (EC 2.7.1.-) precursor - human
C;Species: Homo sapiens (man)
C;Date: 04-Oct-1991 #sequence_revision 13-Jan-1993 #text_change 31-Dec-2004
C;Accession: A36223; I59164
R;Kraus, M.H.; Issing, W.; Miki, T.; Popescu, N.C.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 86, 9193-9197, 1989
A;Title: Isolation and characterization of ERBB3, a third member of the ERBB/epidermal

growth factor receptor family: Evidence for overexpression in a subset of human mammary tumors.
A;Reference number: A36223; MUID:90083234; PMID:2687875
A;Accession: A36223
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-1342 <KRA>
A;Cross-references: UNIPROT:P21860; UNIPARC:UPI000017A3AE; GB:M29366
R;Plowman, G.D.; Whitney, G.S.; Neubauer, M.G.; Green, J.M.; McDonald, V.L.; Todaro, G.J.; Shoyab, M.
Proc. Natl. Acad. Sci. U.S.A. 87, 4905-4909, 1990
A;Title: Molecular cloning and expression of another epidermal growth factor receptor-related gene.
A;Reference number: I59164; MUID:90311312; PMID:2164210
A;Accession: I59164
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-559,'G',561-957,'F',959-1063,'G',1065-1342 <RES>
A;Cross-references: UNIPARC:UPI0000050F2D; GB:M34309; NID:g183990; PIDN:AAA35979.1; PID:g306841
C;Genetics:
A;Gene: GDB:ERBB3; HER3
A;Cross-references: GDB:119880; OMIM:190151
A;Map position: 12q13-12q13
C;Keywords: ATP; phosphotransferase
F;707-972/Domain: protein kinase homology <KIN>
F;715-723/Region: protein kinase ATP-binding motif

  Query Match   100.0%; Score 350; DB 2; Length 1342;
  Best Local Similarity   100.0%; Pred. No. 2.8e-27;
  Matches   58; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

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Qy          1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
```

RESULT 2
JC4387
epidermal growth factor receptor homolog precursor - rat
N;Alternate names: ErbB3 protein; HER3 protein
C;Species: Rattus norvegicus (Norway rat)
C;Date: 17-Jan-1996 #sequence_revision 19-Apr-1996 #text_change 05-Oct-2004
C;Accession: JC4387
R;Hellyer, N.J.; Kim, H.H.; Greaves, C.H.; Sierke, S.L.; Koland, J.G.
Gene 165, 279-284, 1995
A;Title: Cloning of the rat ErbB3 cDNA and characterization of the recombinant protein.
A;Reference number: JC4387; MUID:96096535; PMID:8522190
A;Accession: JC4387
A;Molecule type: mRNA
A;Residues: 1-1339 <HEL>
A;Cross-references: UNIPARC:UPI000017A3DA; GB:U29339; NID:g915389; PID:g915390
A;Experimental source: liver
A;Note: The authors translated the codon AAC for residue 369 as Thr and GTT for residue 370 as Gly
C;Comment: This protein is a functional heregulin receptor that transduces signals to the phosphatidylinositol 3-kinase pathway.

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C;Genetics:
A;Gene: ErbB3
C;Keywords: ATP; growth factor receptor; liver; phosphoprotein; transmembrane protein
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-1339/Product: epidermal growth factor homolog #status predicted <MAT>
F;640-659/Domain: transmembrane #status predicted <TMM>
F;705-970/Domain: protein kinase homology <KIN>
F;713-721/Region: protein kinase ATP-binding motif
F;939,1051,1156,1194,1196,1219,1257,1259,1273,1286,1325/Binding site: phosphate (Tyr)
(covalent) #status predicted

  Query Match             85.1%;  Score 298;  DB 2;  Length 1339;
  Best Local Similarity   84.5%;  Pred. No. 4.2e-22;
  Matches   49;  Conservative    4;  Mismatches    5;  Indels    0;  Gaps    0;

Qy          1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              |||::||  :|:|||||||||||||||| |||||||||| |||||||||| |||
Db        483 DIKYDRPLGECLAEGKVCDPLCSSGGCWGPAPGQCLSCRNYSREGVCVTHCNFLQGEP 540


RESULT 3
A47253
epidermal growth factor receptor, HER4 - human
C;Species: Homo sapiens (man)
C;Date: 22-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 05-Oct-2004
C;Accession: A47253
R;Plowman, G.D.; Culouscou, J.M.; Whitney, G.S.; Green, J.M.; Carlton, G.W.; Foy, L.;
Neubauer, M.G.; Shoyab, M.
Proc. Natl. Acad. Sci. U.S.A. 90, 1746-1750, 1993
A;Title: Ligand-specific activation of HER4/p180erbB4, a fourth member of the epidermal
growth factor receptor family.
A;Reference number: A47253; MUID:93189574; PMID:8383326
A;Accession: A47253
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: nucleic acid
A;Residues: 1-1308 <PLO>
A;Cross-references: UNIPROT:Q15303; UNIPARC:UPI00000499DF; GB:L07868; NID:g337359; PIDN:
AAB59446.1; PID:g337360
A;Note: sequence extracted from NCBI backbone (NCBIP:126842)
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; growth factor receptor
F;716-981/Domain: protein kinase homology <KIN>
F;724-732/Region: protein kinase ATP-binding motif

  Query Match             60.6%;  Score 212;  DB 2;  Length 1308;
  Best Local Similarity   60.7%;  Pred. No. 1.4e-13;
  Matches   34;  Conservative    7;  Mismatches   15;  Indels    0;  Gaps    0;

Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGE 57
              |: ||   :| ||| ||: |||| ||||||| |||||| :||| :|:  ||  :||
Db        487 IRDNRKAENCTAEGMVCNHLCSSDGCWGPGPDQCLSCRRFSRGRICIESCNLYDGE 542


RESULT 4
A36325
epidermal growth factor receptor - rat
C;Species: Rattus norvegicus (Norway rat)
```

C;Date: 25-Jan-1991 #sequence_revision 25-Jan-1991 #text_change 05-Oct-2004
C;Accession: A36325
R;Petch, L.A.; Harris, J.; Raymond, V.W.; Blasband, A.; Lee, D.C.; Earp, H.S.
Mol. Cell. Biol. 10, 2973-2982, 1990
A;Title: A truncated, secreted form of the epidermal growth factor receptor is encoded by an alternatively spliced transcript in normal rat tissue.
A;Reference number: A36325; MUID:90258888; PMID:2342466
A;Accession: A36325
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-644 <PET>
A;Cross-references: UNIPROT:Q9QX70; UNIPARC:UPI0000175620; GB:M37394
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: alternative splicing; ATP; growth factor receptor

  Query Match   57.4%; Score 201; DB 2; Length 644;
  Best Local Similarity   59.6%; Pred. No. 1.1e-12;
  Matches   34; Conservative   5; Mismatches   18; Indels   0; Gaps   0;

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Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              | :||  :|| |   ||:||||| ||||| |  |:||:| |||  ||  || | |||
Db        490 IMNNRAEKDCKATNHVCNPLCSSEGCWGPEPTDCVSCQNVSRGRECVDKCNILEGEP 546
```

RESULT 5
A53183
epidermal growth factor receptor precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 05-Oct-2004
C;Accession: A53183; A43818; S24942; A28941; S45325; I49643
R;Luetteke, N.C.; Phillips, H.K.; Qiu, T.H.; Copeland, N.G.; Earp, H.S.; Jenkins, N.A.; Lee, D.C.
Genes Dev. 8, 399-413, 1994
A;Title: The mouse waved-2 phenotype results from a point mutation in the EGF receptor tyrosine kinase.
A;Reference number: A53183; MUID:94170986; PMID:8125255
A;Accession: A53183
A;Molecule type: mRNA
A;Residues: 1-1210 <LUE>
A;Cross-references: UNIPROT:Q01279; UNIPARC:UPI0000175614; GB:U03425
R;Avivi, A.; Lax, I.; Ullrich, A.; Schlessinger, J.; Givol, D.; Morse, B.
Oncogene 6, 673-676, 1991
A;Title: Comparison of EGF receptor sequences as a guide to study the ligand binding site.
A;Reference number: A43818; MUID:91232866; PMID:2030916
A;Accession: A43818
A;Molecule type: mRNA
A;Residues: 1-714 <AVI>
A;Cross-references: UNIPARC:UPI0000175615; GB:X59698
R;Eisinger, D.P.; Serrero, G.
submitted to the EMBL Data Library, June 1992
A;Reference number: S24942
A;Accession: S24942
A;Molecule type: mRNA
A;Residues: 969-971,'K',973-1115,'D' <EIS>
A;Cross-references: UNIPARC:UPI0000175616; EMBL:Z12608
R;Heisermann, G.J.; Gill, G.N.
J. Biol. Chem. 263, 13152-13158, 1988

A;Title: Epidermal growth factor receptor threonine and serine residues phosphorylated in vivo.
A;Reference number: A28941; MUID:88330814; PMID:3138233
A;Accession: A28941
A;Molecule type: protein
A;Residues: 689-694,'X',696-704,'L',706-707;989-992,'XX',995-996,'X',998-1000;1002-1009,'D',1011-1015,'X',1017-1025;1028-1033;1069-1070,'X',1072-1076,'L' <HEI>
A;Cross-references: UNIPARC:UPI0000175617; UNIPARC:UPI0000175618; UNIPARC:UPI0000175619; UNIPARC:UPI000017561A; UNIPARC:UPI000017561B
R;Hibbs, M.L.; Dunn, A.R.; Alexander, W.S.
submitted to the EMBL Data Library, April 1994
A;Description: The complete cDNA sequence of the Mouse Epidermal Growth Factor Receptor and comparison to its human homologue.
A;Reference number: S45325
A;Accession: S45325
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-971,'K',973-1210 <VER>
A;Cross-references: UNIPARC:UPI000002182B; EMBL:X78987; NID:g488830; PIDN:CAA55587.1; PID:g488831
R;Paria, B.C.; Das, S.K.; Andrews, G.K.; Dey, S.K.
Proc. Natl. Acad. Sci. U.S.A. 90, 55-59, 1993
A;Title: Expression of the epidermal growth factor receptor gene is regulated in mouse blastocysts during delayed implantation.
A;Reference number: I49643; MUID:93126380; PMID:7678348
A;Accession: I49643
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 12-20,22-132 <RES>
A;Cross-references: UNIPARC:UPI000016CD26; GB:L06864; NID:g193001; PIDN:AAA53029.1; PID:g567201
C;Genetics:
A;Gene: EGFR
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; growth factor receptor; kinase-related transforming protein; phosphoprotein; transmembrane protein
F;1-24/Domain: signal sequence #status predicted <SIG>
F;648-670/Domain: transmembrane #status predicted <TMM>
F;712-977/Domain: protein kinase homology <KIN>
F;720-728/Region: protein kinase ATP-binding motif
F;680,695/Binding site: phosphate (Thr) (covalent) #status experimental
F;697,1070,1071/Binding site: phosphate (Ser) (covalent) #status experimental
F;993/Binding site: (or 997) phosphate (Ser) (covalent) #status experimental
F;1028/Binding site: (or 1030 or 1032) phosphate (Ser) (covalent) #status experimental
F;1197/Binding site: phosphate (Tyr) (covalent) #status experimental

  Query Match   57.1%; Score 200; DB 2; Length 1210;
  Best Local Similarity   59.6%; Pred. No. 2.1e-12;
  Matches   34; Conservative   5; Mismatches   18; Indels   0; Gaps   0;

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Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              | :||  :|| |   ||:||||| ||||| |  |:||:| |||  ||  || | |||
Db        490 IMNNRAEKDCKAVNHVCNPLCSSEGCWGPEPRDCVSCQNVSRGRECVEKCNILEGEP 546
```

RESULT 6
TVCHLV

epidermal growth factor receptor precursor - chicken
N;Contains: protein-tyrosine kinase (EC 2.7.1.112) erbB
C;Species: Gallus gallus (chicken)
C;Date: 28-Feb-1986 #sequence_revision 05-May-1995 #text_change 05-Oct-2004
C;Accession: A27720; A00643
R;Lax, I.; Johnson, A.; Howk, R.; Sap, J.; Bellot, F.; Winkler, M.; Ullrich, A.; Vennstrom, B.; Schlessinger, J.; Givol, D.
Mol. Cell. Biol. 8, 1970-1978, 1988
A;Title: Chicken epidermal growth factor (EGF) receptor: cDNA cloning, expression in mouse cells, and differential binding of EGF and transforming growth factor alpha.
A;Reference number: A27720; MUID:88261272; PMID:3260329
A;Accession: A27720
A;Molecule type: mRNA
A;Residues: 1-1223 <LAX>
A;Cross-references: UNIPROT:P00534; UNIPARC:UPI00001725C3; GB:M20386
R;Nilsen, T.W.; Maroney, P.A.; Goodwin, R.G.; Rottman, F.M.; Crittenden, L.B.; Raines, M. A.; Kung, H.J.
Cell 41, 719-726, 1985
A;Title: c-erbB activation in ALV-induced erythroblastosis: novel RNA processing and promoter insertion result in expression of an amino-truncated EGF receptor.
A;Reference number: A00643; MUID:85228222; PMID:2988784
A;Accession: A00643
A;Molecule type: mRNA
A;Residues: 585-1223 <NIL>
A;Cross-references: UNIPARC:UPI00001725C4; GB:M10066
C;Genetics:
A;Gene: erbB
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: alternative splicing; ATP; autophosphorylation; glycoprotein; growth factor receptor; oncogene; phosphoprotein; phosphotransferase; transforming protein; transmembrane protein; tyrosine-specific protein kinase
F;1-30/Domain: signal sequence #status predicted <SIG>
F;31-1223/Product: epidermal growth factor receptor #status predicted <MAT>
F;31-654/Domain: extracellular #status predicted <EXT>
F;81-307/Domain: EGF receptor extracellular domain repeat <EE1>
F;397-610/Domain: EGF receptor extracellular domain repeat <EE2>
F;655-677/Domain: transmembrane #status predicted <TMM>
F;678-1223/Domain: intracellular #status predicted <INT>
F;719-984/Domain: protein kinase homology <KIN>
F;727-735/Region: protein kinase ATP-binding motif
F;136,202,280,361,370,422,575,580,615,635/Binding site: carbohydrate (Thr) (covalent) #status predicted
F;192,650/Binding site: carbohydrate (Ser) (covalent) #status predicted
F;687/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted
F;754/Active site: Lys #status predicted
F;1100,1183,1208/Binding site: phosphate (Tyr) (covalent) (by autophosphorylation) #status predicted

  Query Match   56.6%; Score 198; DB 1; Length 1223;
  Best Local Similarity   59.6%; Pred. No. 3.3e-12;
  Matches   34; Conservative   3; Mismatches   20; Indels   0; Gaps   0;

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Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
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Db        497 IIQNRNKNDCTADRHVCDPLCSDVGCWGPGPFHCFSCRFFSRQKECVKQCNILQGEP 553
```

RESULT 7
GQHUE
epidermal growth factor receptor precursor - human
N;Contains: protein-tyrosine kinase (EC 2.7.1.112) erbB
C;Species: Homo sapiens (man)
C;Date: 15-Nov-1984 #sequence_revision 27-Nov-1985 #text_change 05-Oct-2004
C;Accession: A00641; A25772; S30024; A38672; A00642; A43615; A23062; A05281; A60143; A33331
R;Ullrich, A.; Coussens, L.; Hayflick, J.S.; Dull, T.J.; Gray, A.; Tam, A.W.; Lee, J.; Yarden, Y.; Libermann, T.A.; Schlessinger, J.; Downward, J.; Mayes, E.L.V.; Whittle, N.; Waterfield, M.D.; Seeburg, P.H.
Nature 309, 418-425, 1984
A;Title: Human epidermal growth factor receptor cDNA sequence and aberrant expression of the amplified gene in A431 epidermoid carcinoma cells.
A;Reference number: A00641; MUID:84219729; PMID:6328312
A;Accession: A00641
A;Molecule type: mRNA
A;Residues: 1-1210 <ULL>
A;Cross-references: UNIPROT:P00533; UNIPARC:UPI0000050F30; EMBL:X00588; NID:g31113; PIDN:CAA25240.1; PID:g757924
A;Note: the authors translated the codon AAG for residue 540 as Asn
R;Ishii, S.; Xu, Y.; Stratton, R.H.; Roe, B.A.; Merlino, G.T.; Pastan, I.
Proc. Natl. Acad. Sci. U.S.A. 82, 4920-4924, 1985
A;Title: Characterization and sequence of the promoter region of the human epidermal growth factor receptor gene.
A;Reference number: A25772; MUID:85270438; PMID:2991899
A;Accession: A25772
A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-29 <ISH>
A;Cross-references: UNIPARC:UPI000016A882; GB:M11234; NID:g181981; PIDN:AAA52370.1; PID:g553272
R;Haley, J.; Whittle, N.; Bennett, P.; Kinchington, D.; Ullrich, A.; Waterfield, M.
Oncogene Res. 1, 375-396, 1987
A;Title: The human EGF receptor gene: structure of the 110 kb locus and identification of sequences regulating its transcription.
A;Reference number: S30024; MUID:88217333; PMID:3329716
A;Accession: S30024
A;Molecule type: DNA
A;Residues: 1-29 <HA2>
A;Cross-references: UNIPARC:UPI000016A882; EMBL:X06370; NID:g31118; PIDN:CAA29668.1; PID:g31119
R;Haley, J.D.; Waterfield, M.D.
J. Biol. Chem. 266, 1746-1753, 1991
A;Title: Contributory effects of de Novo transcription and premature transcript termination in the regulation of human epidermal growth factor receptor proto-oncogene RNA synthesis.
A;Reference number: A38672; MUID:91107677; PMID:1988448
A;Accession: A38672
A;Molecule type: DNA
A;Residues: 1-29 <HAL>
A;Cross-references: UNIPARC:UPI000016A882; GB:M38425; NID:g181977; PIDN:AAA63171.1; PID:g553271
A;Experimental source: carcinoma cell line A431-7
R;Xu, Y.; Ishii, S.; Clark, A.J.L.; Sullivan, M.; Wilson, R.K.; Ma, D.P.; Roe, B.A.; Merlino, G.T.; Pastan, I.
Nature 309, 806-810, 1984
A;Title: Human epidermal growth factor receptor cDNA is homologous to a variety of RNAs overproduced in A431 carcinoma cells.

A;Reference number: A00642; MUID:84245835; PMID:6330563
A;Accession: A00642
A;Molecule type: mRNA
A;Residues: 'RCAWRRA',150-187,'KSVIQAV',195,'M',197,'A',199-222,'S',224-304,'RA',307-321,'A',323-372,374-502,504,'GSAMP',510,'A',512,'R',514-517,'RA',521-539,'N',541-667,'IG',670-676,'A',678-794,'SAG',798-799,'TD',802-811,'R',813-942 <XUY>
A;Cross-references: UNIPARC:UPI00001725BD
A;Experimental source: A431 human carcinoma cells, which have large numbers of EGF receptors (a 30-fold amplification of DNA sequence and possible rearrangements) and elevated EGF-binding capacity
R;Lin, C.R.; Chen, W.S.; Kruiger, W.; Stolarsky, L.S.; Weber, W.; Evans, R.M.; Verma, I.M.; Gill, G.N.; Rosenfeld, M.G.
Science 224, 843-848, 1984
A;Title: Expression cloning of human EGF receptor complementary DNA: gene amplification and three related messenger RNA products in A431 cells.
A;Reference number: A43615; MUID:84196372; PMID:6326261
A;Accession: A43615
A;Molecule type: mRNA
A;Residues: 713-964 <LIN>
A;Cross-references: UNIPARC:UPI00001725BE
A;Experimental source: epidermoid carcinoma cell line A431
R;Simmen, F.A.; Gope, M.L.; Schulz, T.Z.; Wright, D.A.; Carpenter, G.; O'Malley, B.W.
Biochem. Biophys. Res. Commun. 124, 125-132, 1984
A;Reference number: A23062; MUID:85046483; PMID:6093780
A;Accession: A23062
A;Molecule type: mRNA
A;Residues: 1028-1210 <SIM>
A;Cross-references: UNIPARC:UPI00001725BF
R;Weber, W.; Gill, G.N.; Speiss, J.
Science 224, 294-297, 1984
A;Reference number: A05281; MUID:84172183; PMID:6324343
A;Accession: A05281
A;Molecule type: protein
A;Residues: 25-30,'S',32-51;454-467 <WEB>
A;Cross-references: UNIPARC:UPI00001725C0; UNIPARC:UPI00001725C1
R;Russo, M.W.; Lukas, T.J.; Cohen, S.; Staros, J.V.
J. Biol. Chem. 260, 5205-5208, 1985
A;Title: Identification of residues in the nucleotide binding site of the epidermal growth factor receptor/kinase.
A;Reference number: A60143; MUID:85182650; PMID:2985580
A;Accession: A60143
A;Molecule type: protein
A;Residues: 740-744,'X',746-747 <RUS>
A;Cross-references: UNIPARC:UPI00001725C2
R;Mroczkowski, B.; Mosig, G.; Cohen, S.
Nature 309, 270-273, 1984
A;Title: ATP-stimulated interaction between epidermal growth factor receptor and supercoiled DNA.
A;Reference number: A38023; MUID:84191554; PMID:6325948
A;Contents: annotation; receptor activity
A;Note: the EGF receptor (and other tyrosine kinases) can nick double-stranded DNA
R;Chen, W.S.; Lazar, C.S.; Lund, K.A.; Welsh, J.B.; Chang, C.P.; Walton, G.M.; Der, C.J.; Wiley, H.S.; Gill, G.N.; Rosenfeld, M.G.
Cell 59, 33-43, 1989
A;Title: Functional independence of the epidermal growth factor receptor from a domain required for ligand-induced internalization and calcium regulation.
A;Reference number: A33331; MUID:90003233; PMID:2790960

A;Contents: annotation; internalization signal
C;Comment: Binding of EGF to the receptor leads to internalization of the EGF-receptor complex, induction of the tyrosine kinase activity, stimulation of cell DNA synthesis, and cell proliferation.
C;Genetics:
A;Gene: GDB:EGFR
A;Cross-references: GDB:120610; OMIM:131550
A;Map position: 7p12.3-7p12.1
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; autophosphorylation; duplication; glycoprotein; phosphoprotein; phosphotransferase; proto-oncogene; receptor; transmembrane protein; tyrosine-specific protein kinase
F;1-24/Domain: signal sequence #status predicted <SIG>
F;25-1210/Product: EGF receptor #status predicted <MAT>
F;25-645/Domain: extracellular #status predicted <EXT>
F;75-300/Domain: EGF receptor extracellular domain repeat <EE1>
F;390-600/Domain: EGF receptor extracellular domain repeat <EE2>
F;646-668/Domain: transmembrane #status predicted <TMM>
F;669-1210/Domain: intracellular #status predicted <INT>
F;710-975/Domain: protein kinase homology <KIN>
F;718-726/Region: protein kinase ATP-binding motif
F;999-1046/Region: coated-pit mediated internalization signal
F;1047-1210/Region: inhibitory
F;128,175,352,413,444,528,603/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;745/Active site: Lys #status experimental

  Query Match 51.1%; Score 179; DB 1; Length 1210;
  Best Local Similarity 57.4%; Pred. No. 2.6e-10;
  Matches 31; Conservative 2; Mismatches 21; Indels 0; Gaps 0;

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Qy          5 NRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              ||    | | |:||  |||  ||||| |  |:|||| |||  ||  |  | |||
Db        493 NRGENSCKATGQVCHALCSPEGCWGPEPRDCVSCRNVSRGRECVDKCKLLEGEP 546
```

RESULT 8
A24571
protein-tyrosine kinase (EC 2.7.1.112) erbB2 precursor - human
N;Alternate names: c-erb-B-2 protein precursor; kinase-related transforming protein erbB2; v-erbB-related protein HER-2/neu
C;Species: Homo sapiens (man)
C;Date: 25-Oct-1987 #sequence_revision 06-Dec-1996 #text_change 05-Oct-2004
C;Accession: A24571; A25491; A44188; B44188; I59509; I57622
R;Yamamoto, T.; Ikawa, S.; Akiyama, T.; Semba, K.; Nomura, N.; Miyajima, N.; Saito, T.; Toyoshima, K.
Nature 319, 230-234, 1986
A;Title: Similarity of protein encoded by the human c-erb-B-2 gene to epidermal growth factor receptor.
A;Reference number: A24571; MUID:86118663; PMID:3003577
A;Accession: A24571
A;Molecule type: mRNA
A;Residues: 1-1255 <YAM>
A;Cross-references: UNIPROT:P04626; UNIPARC:UPI000003F55F; GB:X03363; NID:g31197; PIDN:CAA27060.1; PID:g31198
R;Semba, K.; Kamata, N.; Toyoshima, K.; Yamamoto, T.
Proc. Natl. Acad. Sci. U.S.A. 82, 6497-6501, 1985
A;Title: A v-erbB-related protooncogene, c-erbB-2, is distinct from the c-erbB-1/epidermal

growth factor-receptor gene and is amplified in a human salivary adenocarcinoma.
A;Reference number: A25491; MUID:86016729; PMID:2995967
A;Accession: A25491
A;Molecule type: DNA
A;Residues: 737-1031 <SEM>
A;Cross-references: UNIPARC:UPI000016A8A7; GB:M11767; NID:g182163; PIDN:AAA35808.1; PID:
g553282
R;Coussens, L.; Yang-Feng, T.L.; Liao, Y.C.; Chen, E.; Gray, A.; McGrath, J.; Seeburg, P.
H.; Libermann, T.A.; Schlessinger, J.; Francke, U.; Levinson, A.; Ullrich, A.
Science 230, 1132-1139, 1985
A;Title: Tyrosine kinase receptor with extensive homology to EGF receptor shares
chromosomal location with neu oncogene.
A;Reference number: A44188; MUID:86070181; PMID:2999974
A;Accession: A44188
A;Molecule type: DNA
A;Residues: 740-910 <COU1>
A;Cross-references: UNIPARC:UPI000016AA26; GB:M12036; NID:g183988; PIDN:AAA35978.1; PID:
g183989
A;Accession: B44188
A;Molecule type: mRNA
A;Residues: 1-517,'RALL',522,'S',524-654,'V',656-1169,'A',1171-1255 <COU2>
A;Cross-references: UNIPARC:UPI00001725C7; GB:M11730; NID:g183986
R;King, C.R.; Kraus, M.H.; Aaronson, S.A.
Science 229, 974-976, 1985
A;Title: Amplification of a novel v-erbB-related gene in a human mammary carcinoma.
A;Reference number: I59509; MUID:85272597; PMID:2992089
A;Accession: I59509
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 832-909 <REX>
A;Cross-references: UNIPARC:UPI0000070A3F; GB:L29395; NID:g459807; PIDN:AAA35809.1; PID:
g459808
R;Tal, M.; King, C.R.; Kraus, M.H.; Ullrich, A.; Schlessinger, J.; Givol, D.
Mol. Cell. Biol. 7, 2597-2601, 1987
A;Title: Human HER2 (neu) promoter: evidence for multiple mechanisms for transcriptional
initiation.
A;Reference number: I57622; MUID:87286898; PMID:3039351
A;Accession: I57622
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-191 <TAL>
A;Cross-references: UNIPARC:UPI0000000427; GB:M16792; NID:g183983; PIDN:AAA58637.1; PID:
g553332
C;Comment: Amplification and overexpression of this erbB-related gene occurs in about 30%
of human breast and ovarian cancers.
C;Genetics:
A;Gene: GDB:ERBB2; NGL; NEU; HER-2
A;Cross-references: GDB:120613; OMIM:164870
A;Map position: 17q21.1-17q21.1
A;Introns: 25/1; 75/3; 147/1; 883/3
A;Note: the list of introns is incomplete
C;Function:
A;Description: catalyzes the phosphorylation of a peptidyl tyrosine residue by ATP
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; autophosphorylation; duplication; glycoprotein; phosphoprotein;
phosphotransferase; proto-oncogene; receptor; transforming protein; transmembrane protein;
tyrosine-specific protein kinase

F;1-21/Domain: signal sequence #status predicted <SIG>
F;22-1255/Product: protein-tyrosine kinase erbB2 #status predicted <MAT>
F;22-653/Domain: extracellular #status predicted <EXT>
F;70-304/Domain: EGF receptor extracellular domain repeat <EE1>
F;395-605/Domain: EGF receptor extracellular domain repeat <EE2>
F;654-675/Domain: transmembrane #status predicted <TMM>
F;676-1255/Domain: intracellular #status predicted <INT>
F;718-983/Domain: protein kinase homology <KIN>
F;726-734/Region: protein kinase ATP-binding motif
F;68,124,187,259,530,571,629/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;686/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted
F;753/Active site: Lys #status predicted
F;1139,1221,1222,1248/Binding site: phosphate (Tyr) (covalent) (by autophosphorylation) #status predicted

  Query Match   49.7%; Score 174; DB 1; Length 1255;
  Best Local Similarity   51.9%; Pred. No. 8.2e-10;
  Matches   28; Conservative   5; Mismatches   21; Indels   0; Gaps   0;

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Qy          5 NRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              |||  :|| ||  |  ||: | |||||| ||::|  : ||  ||  |  | | |
Db        498 NRPEDECVGEGLACHQLCARGHCWGPGPTQCVNCSQFLRGQECVEECRVLQGLP 551
```

RESULT 9
TVRTNU
protein-tyrosine kinase (EC 2.7.1.112) neu precursor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 05-Oct-2004
C;Accession: A24562; A61204
R;Bargmann, C.I.; Hung, M.C.; Weinberg, R.A.
Nature 319, 226-230, 1986
A;Title: The neu oncogene encodes an epidermal growth factor receptor-related protein.
A;Reference number: A24562; MUID:86118662; PMID:3945311
A;Accession: A24562
A;Molecule type: mRNA
A;Residues: 1-1260 <BAR>
A;Cross-references: UNIPROT:P06494; UNIPARC:UPI0000161B83; EMBL:X03362; NID:g56745; PIDN:CAA27059.1; PID:g56746
R;Masui, T.; Mann, A.M.; Macatee, T.L.; Garland, E.M.; Okamura, T.; Smith, R.A.; Cohen, S.M.
Carcinogenesis 12, 1975-1978, 1991
A;Title: Direct DNA sequencing of the rat neu oncogene transmembrane domain reveals no mutation in urinary bladder carcinomas induced by N-butyl-N-(4-hydroxybutyl)nitrosamine, N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide or N-methyl-N-nitrosourea.
A;Reference number: A61204; MUID:92035293; PMID:1682063
A;Accession: A61204
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 637-663,'V',665-702 <MAS>
A;Cross-references: UNIPARC:UPI00001725C8
A;Note: authors translated the codon GCA for residue 25 as Val
C;Genetics:
A;Gene: neu
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; autophosphorylation; duplication; glycoprotein; phosphoprotein; phosphotransferase; proto-oncogene; transforming protein; transmembrane protein; tyrosine-specific protein kinase

```
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-1260/Product: protein-tyrosine kinase neu #status predicted <MAT>
F;658-680/Domain: transmembrane #status predicted <TMN>
F;723-988/Domain: protein kinase homology <KIN>
F;731-739/Region: protein kinase ATP-binding motif
F;71,191,263,535,576,634/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;691/Binding site: phosphate (Thr) (covalent) #status predicted
F;758/Active site: Lys #status predicted
F;882,1227,1253/Binding site: phosphate (Tyr) (covalent) #status predicted

  Query Match             47.6%;  Score 166.5;  DB 1;  Length 1260;
  Best Local Similarity   50.9%;  Pred. No. 4.6e-09;
  Matches   28;  Conservative    7;  Mismatches   19;  Indels    1;  Gaps    1;

Qy          5 NRPRRD-CVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              |||   | ||: | ||: ||: | |||||| ||::| :: ||  ||  |    | |
Db        502 NRPEEDLCVSSGLVCNSLCAHGHCWGPGPTQCVNCSHFLRGQECVEECRVWKGLP 556


RESULT 10
S70713
protein-tyrosine kinase let-23 precursor homolog - Caenorhabditis vulgaris
N;Alternate names: receptor tyrosine kinase let-23 homolog
C;Species: Caenorhabditis vulgaris
C;Date: 21-Apr-1997 #sequence_revision 09-May-1997 #text_change 05-Oct-2004
C;Accession: S70713
R;Sakai, T.; Koga, M.; Ohshima, Y.
J. Mol. Biol. 256, 548-555, 1996
A;Title: Genomic structure and 5' regulatory regions of the let-23 gene in the nematode C.
elegans.
A;Reference number: S70712; MUID:96177760; PMID:8604137
A;Accession: S70713
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-1369 <SAK>
A;Cross-references: UNIPROT:Q23821; UNIPARC:UPI000017A3EC; EMBL:D63427
C;Genetics:
A;Gene: let-23
A;Introns: 42/1; 49/1; 83/1; 105/3; 155/3; 207/1; 280/1; 369/1; 408/1; 438/2; 555/1; 598/2;
673/2; 733/3; 830/3; 882/3; 1147/1; 1247/3; 1274/1; 1309/1
C;Keywords: ATP; phosphotransferase; transmembrane protein; tyrosine-specific protein kinase
F;1-28/Domain: signal sequence #status predicted <SIG>
F;29-1369/Product: protein-tyrosine kinase let-23 homolog #status predicted <MAT>
F;929-1194/Domain: protein kinase homology <KIN>
F;937-945/Region: protein kinase ATP-binding motif

  Query Match             43.0%;  Score 150.5;  DB 2;  Length 1369;
  Best Local Similarity   40.7%;  Pred. No. 1.9e-07;
  Matches   24;  Conservative   12;  Mismatches   20;  Indels    3;  Gaps    1;

Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCN---FLNGE 57
              :: || |: |: | ::||| |:| ||||  |  |  || ::  | ||: |:   ||  :
Db        546 VEENRDRKLCIQEEEICDPNCNSRGCWGKRPEDCRECRTWNNMGTCVSKCDTIGFLRNQ 604


RESULT 11
S06142
```

protein-tyrosine kinase (EC 2.7.1.112) mrk-Y precursor - southern platyfish
N;Alternate names: epidermal growth factor receptor homolog; kinase-related transforming protein Tu; melanoma-inducing protein
C;Species: Xiphophorus maculatus (southern platyfish)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 05-Oct-2004
C;Accession: S06142; S13809
R;Wittbrodt, J.; Adam, D.; Malitschek, B.; Maeueler, W.; Raulf, F.; Telling, A.; Robertson, S.M.; Schartl, M.
Nature 341, 415-421, 1989
A;Title: Novel putative receptor tyrosine kinase encoded by the melanoma-inducing Tu locus in Xiphophorus.
A;Reference number: S06142; MUID:90015140; PMID:2797166
A;Accession: S06142
A;Molecule type: DNA
A;Residues: 1-1166 <WIT>
A;Cross-references: UNIPROT:P13388; UNIPARC:UPI00001725C5; EMBL:X16891; NID:g65290; PIDN:CAA34770.1; PID:g65291
R;Adam, D.; Maeueler, W.; Schartl, M.
Oncogene 6, 73-80, 1991
A;Title: Transcriptional activation of the melanoma inducing Xmrk oncogene in Xiphophorus.
A;Reference number: S13807; MUID:91125882; PMID:1846957
A;Accession: S13809
A;Status: preliminary; translation not shown
A;Molecule type: DNA
A;Residues: 821-1025,'N',1027-1098,'A',1100-1166 <ADA>
A;Cross-references: UNIPARC:UPI00001715E2; EMBL:X56319; NID:g65284; PIDN:CAA39763.1; PID:g65285
C;Genetics:
A;Gene: mrk
A;Map position: Y
A;Introns: 872/3; 898/1; 947/1; 979/3; 1025/3; 1056/1
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP; growth factor receptor; phosphotransferase; transmembrane protein; tyrosine-specific protein kinase
F;1-25/Domain: signal sequence #status predicted <SIG>
F;26-1166/Product: kinase-related transforming protein (Tu) #status predicted <MAT>
F;707-972/Domain: protein kinase homology <KIN>
F;715-723/Region: protein kinase ATP-binding motif

  Query Match   41.0%; Score 143.5; DB 1; Length 1166;
  Best Local Similarity   51.0%; Pred. No. 8.3e-07;
  Matches   25; Conservative   4; Mismatches   19; Indels   1; Gaps   1;

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Qy         10 DCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              |   | : |:  ||  ||| |||  |:|| :  ||| ||  || | |||
Db        496 DARTENQTCNNECSEDGCW-PGPTMCVSCLHVDRGGRCVASCNLLQGEP 543
```

RESULT 12
I48161
p-185 precursor - golden hamster
C;Species: Mesocricetus auratus (golden hamster)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Oct-2004
C;Accession: I48161
R;Nakamura, T.; Ushijima, T.; Ishizaka, Y.; Nagao, M.; Arai, M.; Yamazaki, Y.; Ishikawa, T.
Gene 140, 251-255, 1994
A;Title: Cloning and activation of the Syrian hamster neu proto-oncogene.

A;Reference number: I48161; MUID:94193007; PMID:7908275
A;Accession: I48161
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-1254 <RES>
A;Cross-references: UNIPROT:Q60553; UNIPARC:UPI000012A111; GB:D16295; NID:g493236; PIDN:
BAA03801.1; PID:g747595
C;Genetics:
A;Gene: neu
C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP
F;718-983/Domain: protein kinase homology <KIN>
F;726-734/Region: protein kinase ATP-binding motif

  Query Match   40.6%; Score 142; DB 2; Length 1254;
  Best Local Similarity   42.6%; Pred. No. 1.2e-06;
  Matches   23; Conservative   7; Mismatches   24; Indels   0; Gaps   0;

```
Qy          5 NRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              |    :|  :   | |||: | |||||| ||::| :: ||  ||  |    | |
Db        498 NPSEEECGLKDFACYPLCAHGHCWGPGPTQCVNCSHFLRGQECVKECRVWKGLP 551
```

RESULT 13
A27131
epidermal growth factor receptor - fruit fly (Drosophila melanogaster) (fragment)
C;Species: Drosophila melanogaster
C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 31-Dec-2004
C;Accession: A27131
R;Schejter, E.D.; Segal, D.; Glazer, L.; Shilo, B.Z.
Cell 46, 1091-1101, 1986
A;Title: Alternative 5' exons and tissue-specific expression of the Drosophila EGF receptor
homolog transcripts.
A;Reference number: A27131; MUID:87002474; PMID:3093080
A;Accession: A27131
A;Molecule type: mRNA
A;Residues: 1-843 <SCH>
A;Cross-references: UNIPROT:Q8MLW0; UNIPARC:UPI0000175612
C;Genetics:
A;Gene: FlyBase:Egfr
A;Cross-references: FlyBase:FBgn0003731
C;Superfamily: protein kinase homology
C;Keywords: ATP; growth factor receptor

  Query Match   38.0%; Score 133; DB 2; Length 843;
  Best Local Similarity   37.8%; Pred. No. 7.3e-06;
  Matches   17; Conservative   10; Mismatches   18; Indels   0; Gaps   0;

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Qy         11 CVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLN 55
              |   | :|   |:  |||| |  |||:|:|::  | |:  | :::
Db        517 CEKNGTICSDQCNEDGCWGAGTDQCLTCKNFNFNGTCIADCGYIS 561
```

RESULT 14
E88257
protein let-23 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans

C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 05-Oct-2004
C;Accession: E88257
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biology.
A;Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/
C_elegans/ for a list of authors
A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and
Science 285, 1493, 1999
A;Accession: E88257
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1323 <STO>
A;Cross-references: UNIPARC:UPI0000164043; GB:chr_II; PIDN:CAA93882.1; PID:g3881523; GSPDB:
GN00020
C;Genetics:
A;Gene: let-23
A;Map position: 2

  Query Match   36.7%; Score 128.5; DB 2; Length 1323;
  Best Local Similarity   39.0%; Pred. No. 2.8e-05;
  Matches   23; Conservative   7; Mismatches   26; Indels   3; Gaps   1;

```
Qy          2 IKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCN---FLNGE 57
              |  ||  : |  | :|||  |:  ||||  |  || |: :   | ||  |:   ||  :
Db        504 IAENRDSKLCETEQRVCDKNCNKRGCWGKEPEDCLECKTWKSVGTCVEKCDTKGFLRNQ 562
```

RESULT 15
S70712
protein-tyrosine kinase (EC 2.7.1.112) let-23 precursor - Caenorhabditis elegans
N;Alternate names: receptor tyrosine kinase let-23
C;Species: Caenorhabditis elegans
C;Date: 21-Apr-1997 #sequence_revision 09-May-1997 #text_change 05-Oct-2004
C;Accession: S70712; S73101; S13422; T27682
R;Sakai, T.; Koga, M.; Ohshima, Y.
J. Mol. Biol. 256, 548-555, 1996
A;Title: Genomic structure and 5' regulatory regions of the let-23 gene in the nematode C.
elegans.
A;Reference number: S70712; MUID:96177760; PMID:8604137
A;Accession: S70712
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-1374 <SAK>
A;Cross-references: UNIPROT:P24348; UNIPARC:UPI000017A472; EMBL:D63426
A;Experimental source: strain N2
R;Koga, M.
submitted to the EMBL Data Library, July 1995
A;Reference number: S73101
A;Accession: S73101
A;Molecule type: DNA
A;Residues: 1-50,'G',52-1374 <KOG>
A;Cross-references: UNIPARC:UPI000016B8F7; EMBL:D63426; NID:g1407562; PIDN:BAA09729.1; PID:
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A;Experimental source: strain N2
R;Aroian, R.V.; Koga, M.; Mendel, J.E.; Ohshima, Y.; Sternberg, P.W.

Nature 348, 693-699, 1990
A;Title: The let-23 gene necessary for Caenorhabditis elegans vulval induction encodes a tyrosine kinase of the EGF receptor subfamily.
A;Reference number: S13422; MUID:91080919; PMID:1979659
A;Accession: S13422
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A;Cross-references: UNIPARC:UPI0000164043
R;Thomas, K.
submitted to the EMBL Data Library, March 1996
A;Reference number: Z20404
A;Accession: T27682
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
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A;Experimental source: clone ZK1067
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A;Map position: 2
A;Introns: 44/1; 51/1; 90/1; 112/3; 165/3; 217/1; 290/1; 379/1; 418/1; 448/2; 565/1; 608/2; 682/2; 742/3; 836/3; 888/3; 1256/3; 1283/1; 1319/1
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F;942-950/Region: protein kinase ATP-binding motif

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